

Title (en)

METHOD AND CONTROL DEVICE FOR RECOVERY OF ENERGY IN A HYBRID VEHICLE

Title (de)

VERFAHREN UND STEUERVORRICHTUNG ZUR REKUPERATION VON ENERGIE IN EINEM HYBRIDFAHRZEUG

Title (fr)

PROCEDE ET DISPOSITIF DE COMMANDE DESTINES A RECUPERER DE L'ENERGIE DANS UN VEHICULE HYBRIDE

Publication

EP 3095658 B1 20221130 (DE)

Application

EP 16000918 A 20160422

Priority

DE 102015006454 A 20150519

Abstract (en)

[origin: US2016339901A1] A method and apparatus for recuperating energy in a hybrid vehicle, having an internal combustion engine an electrical machine, and on-board electrical system with an energy store that can be charged with electrical energy during a recuperation operation. A recuperation power for a recuperation operation of the electrical machine is set to a first value that allows a recuperation operation with a maximum generator capacity of the electrical machine if an actual energy level of the energy store is lower than or equal to a threshold value. However, the recuperation power for a recuperation operation is set to a second value lower than the first value and allows a recuperation operation with a reduced generator capacity of the electrical machine if the actual energy level of the energy store is greater than the threshold value.

IPC 8 full level

B60W 20/40 (2016.01); **F02N 11/00** (2006.01)

CPC (source: CN EP RU US)

B60K 6/26 (2013.01 - RU US); **B60L 7/10** (2013.01 - CN); **B60L 7/14** (2013.01 - EP RU US); **B60L 58/13** (2019.01 - EP RU US);
B60L 58/15 (2019.01 - EP US); **B60W 10/06** (2013.01 - EP RU US); **B60W 10/08** (2013.01 - EP RU US); **B60W 10/26** (2013.01 - CN EP RU US);
B60W 20/00 (2013.01 - CN); **B60W 20/14** (2016.01 - EP RU US); **B60W 50/0097** (2013.01 - EP RU US); **F02N 11/0825** (2013.01 - EP RU US);
F02N 11/0866 (2013.01 - EP RU US); **B60K 2006/268** (2013.01 - EP US); **B60W 2510/244** (2013.01 - EP); **B60W 2520/10** (2013.01 - EP US);
B60W 2710/248 (2013.01 - EP US); **F02N 2011/0896** (2013.01 - EP US); **F02N 2200/046** (2013.01 - EP US); **F02N 2200/061** (2013.01 - EP US);
F02N 2200/0801 (2013.01 - EP US); **Y02T 10/40** (2013.01 - EP US); **Y02T 10/62** (2013.01 - EP US); **Y02T 10/70** (2013.01 - EP US);
Y10S 903/93 (2013.01 - EP US)

Citation (examination)

- US 2011276243 A1 20111110 - MINARCI MONIKA A [US], et al
- DE 102010034672 A1 20120223 - VOLKSWAGEN AG [DE]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3095658 A1 20161123; EP 3095658 B1 20221130; BR 102016010476 A2 20161122; BR 102016010476 A8 20210914;
BR 102016010476 B1 20221004; CN 106167021 A 20161130; CN 106167021 B 20200717; DE 102015006454 A1 20161124;
EP 4144604 A1 20230308; RU 2016119104 A 20171124; RU 2016119104 A3 20190821; RU 2711877 C2 20200123; US 10166969 B2 20190101;
US 2016339901 A1 20161124

DOCDB simple family (application)

EP 16000918 A 20160422; BR 102016010476 A 20160509; CN 201610333608 A 20160519; DE 102015006454 A 20150519;
EP 22201239 A 20160422; RU 2016119104 A 20160518; US 201615157629 A 20160518